

### General

#### Title

Myelodysplastic syndromes (MDS): percentage of MDS patients presenting with anemia who had a serum erythropoietin level less than or equal to 500 mU/ml prior to receiving erythropoietin/darbepoetin therapy.

## Source(s)

American Society of Hematology (ASH). Myelodysplastic syndromes (MDS) measure set: measure specifications. Washington (DC): American Society of Hematology (ASH); 2017 Feb. 14 p.

### Measure Domain

## Primary Measure Domain

Clinical Quality Measures: Process

## Secondary Measure Domain

Does not apply to this measure

# **Brief Abstract**

## Description

This measure is used to assess the percentage of myelodysplastic syndromes (MDS) patients greater than 18 years old presenting with anemia (hemoglobin [Hgb] less than 10 g/dL) who had a serum erythropoietin level less than or equal to 500 mU/ml prior to receiving erythropoietin/darbepoetin therapy.

#### Rationale

Excerpts (verbatim) from guidelines:

A validated decision model has been developed for predicting erythroid responses to erythropoietin (Epo) plus granulocyte-colony stimulating factor (G-CSF), based on the patient's basal serum Epo (sEpo) level and number of previous red blood cells (RBC) transfusions. This cytokine treatment is not suggested for patients with endogenous sEpo levels greater than 500 mU/mL due to the very low erythroid response rate to these drugs in this patient population (National Comprehensive Cancer Network [NCCN], 2016).

#### Evidence for Rationale

American Society of Hematology (ASH). Myelodysplastic syndromes (MDS) measure set: measure specifications. Washington (DC): American Society of Hematology (ASH); 2017 Feb. 14 p.

National Comprehensive Cancer Network (NCCN). NCCN clinical practice guidelines in oncology: myelodysplastic syndromes. V2.2017. Fort Washington (PA): National Comprehensive Cancer Network (NCCN); 2016 Nov 10.

### Primary Health Components

Myelodysplastic syndromes (MDS); anemia; serum erythropoietin level; erythropoietin therapy; darbepoetin therapy

### **Denominator Description**

The number of myelodysplastic syndromes (MDS) patients in your selection who are being treated with erythropoietin/darbepoetin (see the related "Denominator Inclusions/Exclusions" field)

### **Numerator Description**

The number of myelodysplastic syndromes (MDS) patients in your selection

AND

Being treated with erythropoietin/darbepoetin

AND

Who have serum erythropoietin level less than or equal to 500 mU/mL prior to receiving erythropoietin/darbepoetin therapy

See the related "Numerator Inclusions/Exclusions" field.

# Evidence Supporting the Measure

## Type of Evidence Supporting the Criterion of Quality for the Measure

A clinical practice guideline or other peer-reviewed synthesis of the clinical research evidence

# Additional Information Supporting Need for the Measure

Evidence of gap:

The American Society of Hematology (ASH) conducted an analysis of the results of the myelodysplastic syndromes (MDS) chart abstraction done since the tool was released in 2006 ( $\sim$ 1400 patients). Performance for this measure was 64.6%. Since 2013, performance for this measure was 67% for 203 patients.

## Evidence for Additional Information Supporting Need for the Measure

### **Extent of Measure Testing**

The myelodysplastic syndromes (MDS) measure set was developed by the American Society of Hematology (ASH) using a rigorous methodology (adapted from the American Medical Association [AMA]-convened Physician Consortium for Performance Improvement [PCPI]) and has been field tested. The MDS measure set was accepted by American Board of Internal Medicine (ABIM) for use with practice improvement modules meeting Part 4 of Maintenance of Certification Requirements in 2006.

### Evidence for Extent of Measure Testing

Frechette S. (Principal, Northfield Associates, LLC, Warren, VT). Personal communication. 2014 Dec 10. 1 p.

## State of Use of the Measure

#### State of Use

Current routine use

#### **Current Use**

not defined yet

# Application of the Measure in its Current Use

## Measurement Setting

Ambulatory/Office-based Care

## Professionals Involved in Delivery of Health Services

not defined yet

# Least Aggregated Level of Services Delivery Addressed

Individual Clinicians or Public Health Professionals

## Statement of Acceptable Minimum Sample Size

Specified

# Target Population Age

Age greater than 18 years

## Target Population Gender

Either male or female

# National Strategy for Quality Improvement in Health Care

## National Quality Strategy Aim

Better Care

## National Quality Strategy Priority

Prevention and Treatment of Leading Causes of Mortality

# Institute of Medicine (IOM) National Health Care Quality Report Categories

#### IOM Care Need

Living with Illness

#### **IOM Domain**

Effectiveness

# Data Collection for the Measure

# Case Finding Period

Unspecified

## **Denominator Sampling Frame**

Patients associated with provider

## Denominator (Index) Event or Characteristic

Clinical Condition

Encounter

Patient/Individual (Consumer) Characteristic

Therapeutic Intervention

#### **Denominator Time Window**

not defined yet

### **Denominator Inclusions/Exclusions**

Inclusions

The number of myelodysplastic syndromes (MDS) patients in your selection who are being treated with erythropoietin/darbepoetin

Patients can be included in the chart abstraction if:

They have been seen by the practice within the past 18 months

Management decisions regarding care are made primarily by providers in the practice

They are greater than 18 years old (or the age at which your institution refers to adult hematologists)

Note: Refer to the original measure documentation for a list of International Classification of Diseases, Tenth Revision (ICD-10) codes used in MDS patient selection and a list of Healthcare Common Procedure Coding System (HCPCS) codes for erythropoietin/darbepoetin therapy.

Exclusions

None

### Exclusions/Exceptions

not defined yet

### Numerator Inclusions/Exclusions

Inclusions

The number of myelodysplastic syndromes (MDS) patients in your selection

AND

Being treated with erythropoietin/darbepoetin

AND

Who have serum erythropoietin level less than or equal to 500 mU/mL prior to receiving erythropoietin/darbepoetin therapy

Note: Refer to the original measure documentation for a list of International Classification of Diseases, Tenth Revision (ICD-10) codes used in MDS patient selection and a list of Healthcare Common Procedure Coding System (HCPCS) codes for erythropoietin/darbepoetin therapy.

Exclusions

None

# Numerator Search Strategy

Fixed time period or point in time

#### **Data Source**

Administrative clinical data

Paper medical record

## Type of Health State

Does not apply to this measure

### Instruments Used and/or Associated with the Measure

Unspecified

# Computation of the Measure

## Measure Specifies Disaggregation

Does not apply to this measure

## Scoring

Rate/Proportion

## Interpretation of Score

Desired value is a higher score

## Allowance for Patient or Population Factors

not defined yet

# Standard of Comparison

not defined yet

# **Identifying Information**

# Original Title

Measure 4: MDS patient presenting with anemia (Hgb<10 g/dL) had serum erythropoietin level  $\leq$ 500 mU/ml prior to receiving erythropoietin/darbepoietin therapy.

#### Measure Collection Name

Myelodysplastic Syndromes Measure Set

#### Submitter

American Society of Hematology - Medical Specialty Society

# Developer

## Funding Source(s)

The American Society of Hematology

## Composition of the Group that Developed the Measure

The American Society of Hematology (ASH) Myelodysplastic Syndromes (MDS) Task Force:

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### Financial Disclosures/Other Potential Conflicts of Interest

Unspecified

## Adaptation

This measure was not adapted from another source.

## Date of Most Current Version in NQMC

2017 Feb

#### Measure Maintenance

American Society of Hematology (ASH) reviews/updates measures annually

# Date of Next Anticipated Revision

Unspecified

#### Measure Status

This is the current release of the measure.

This measure updates a previous version: American Society of Hematology (ASH). Myelodysplastic syndromes (MDS) measure set: measure specifications. Washington (DC): American Society of Hematology (ASH); 2015 Dec. 16 p.

### Measure Availability

Source not available electronically.

For more information, contact the American Society of Hematology (ASH) at 2021 L Street NW, Suite 900, Washington, DC 20036; Phone: 202-776-0544; Fax: 202-776-0545; Web site: www.hematology.org

### **NQMC Status**

This NQMC summary was completed by ECRI Institute on July 20, 2015. The information was verified by the measure developer on August 27, 2015.

This NQMC summary was updated by ECRI Institute on April 18, 2016. The information was verified by the measure developer on May 24, 2016.

This NQMC summary was updated again by ECRI Institute on March 21, 2017. The information was verified by the measure developer on May 3, 2017.

## Copyright Statement

This NQMC summary is based on the original measure, which is subject to the measure developer's copyright restrictions.

For more information, contact Robert M. Plovnick, MD, MS, Director of Quality Improvement Programs at American Society of Hematology 2021 L Street NW, Suite 900 Washington, DC 20036.

# Production

## Source(s)

American Society of Hematology (ASH). Myelodysplastic syndromes (MDS) measure set: measure specifications. Washington (DC): American Society of Hematology (ASH); 2017 Feb. 14 p.

# Disclaimer

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